HWG | HARRIS, WILTSHIRE & GRANNIS LLP

January 22, 2018

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket No. 03-123; *Structure and Practices of the Video Relay Service Program*, CG Docket No. 10-51

Dear Ms. Dortch:

On January 18, 2018, Grant Beckmann, Chief Technology Officer of Sorenson Communications, LLC ("Sorenson") (via teleconference), and Randall Sifers and I, outside counsel to Sorenson, met with Eliot Greenwald, Deputy Chief of the Disability Rights Office ("DRO"), Michael Scott, Attorney Advisor of the DRO, and David Schmidt, TRS Fund Program Coordinator (via teleconference) to discuss three items: (1) Sorenson's pending request to suspend the April 2018 deadline for VRS providers to implement the Relay User Equipment ("RUE") Profile for ensuring provider interoperability with the Accessible Communication for Everyone ("ACE") App; (2) Neustar's proposal to require users to log in before using a public videophone; and (3) Sorenson's early experiences with submitting user data to the TRS User Registration Database ("URD"). Below is a summary of the discussions for each item.

***RUE Profile/ACE App*.** Sorenson inquired about the status of its pending request, as an initial step prior to completing consideration of pending petitions for reconsideration, to suspend the RUE Profile implementation deadline.[1] Staff acknowledged that the ACE App is still under testing and is not in a version suitable for interoperability testing by VRS providers. Staff

[1] *See, e.g.*, Letter from Julie A. Veach, Counsel to Sorenson Communications, LLC to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 10-51 & 03-123 (filed Oct. 25, 2017); Letter from John T. Nakahata, Counsel to Sorenson Communications, LLC to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 10-51 & 03-123 (filed Oct. 13, 2017); Sorenson also has a pending petition for reconsideration with respect to the underlying requirement to implement the ACE App. Sorenson Communications, LLC, Petition for Reconsideration, or in the Alternative, Suspension of the RUE Implementation Deadline, CG Docket Nos. 10-51 & 03-123 (May 30, 2017). As Sorenson has previously set forth, the requirement is no longer necessary to support interoperability among VRS providers. *Id.* at 17-18. The ACE App and RUE are akin to the Commission's "allvid" efforts to require MVPDs to use a uniform access device or household server.

advised that the DRO is awaiting approval on an order to suspend for a yet-to-be-determined period the April 2018 compliance date to implement the RUE Profile.

At staff's request, Sorenson will compile a list of actions not within the VRS providers' control that must be completed before providers can complete software development, testing, and deployment to ensure their platforms are interoperable with the ACE App.[2] The core problems, as already reported by Sorenson, are significant security and safety issues with the current interface. These security issues, if not addressed before forcing implementation, have the effect of putting all of VRS at risk of security attacks. Further, the emergency calling (911) concerns already raised, put the health and safety of users at risk.[3]

After these actions have been completed, VRS providers will need a period of one year to implement the Relay User Equipment ("RUE") Profile to ensure their networks are interoperable with the ACE App.[4]

Neustar's Proposed Log In Requirement to Use Public Videophones. FCC staff explained that the reason for advancing Neustar's proposal is to reduce the possibility of fraud and abuse, such as the hiring of Deaf individuals to place unnecessary "minute-pumping" calls, by allowing the use of VRS public phones only by individuals whose eligibility to use the service has been verified and whose registration has been validated on a call-by-call basis. Sorenson fully supports efforts to eliminate fraud and abuse. However, Sorenson reiterated (as explained in prior ex partes[5]) that, given existing safeguards and the fact that point-to-point calls are not compensable, the possibility that an ineligible user would succeed in placing a call on a public or enterprise videophone is so small that the benefits of implementing Neustar's proposal would be substantially outweighed by the burdens imposed on users and the significant implementation costs imposed on providers. Moreover, other alternatives to Neustar's proposal, such as having a Deaf consumer enter his or her VRS phone number, would allow for tracking of individual use.

If the Commission were to move ahead to require use of the OAuth protocol according to Neustar's proposal, Sorenson would have to shut down approximately 1,600 public phones operating in universities (including Gallaudet and Rochester Institute of Technology), K-12 schools focused on education of the Deaf, airports, and, depending on how the FCC delineates

---

2 Sorenson will submit the list in a follow-up filing after it has been compiled.

3 *See* Letter from John T. Nakahata, Counsel to Sorenson Communications, LLC to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 10-51 & 03-123, at 5 (filed Nov. 2, 2017).

4 Structure and Practices of the Video Relay Service Program, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, *Report and Order and Further Notice of Proposed Rulemaking*, 32 FCC Rcd. 687, 692, ¶ 14 (2017) ("*2017 VRS Interoperability Order*") ("we conclude that it is reasonable to allow one year for VRS providers to complete software development, testing, and deployment to ensure that their networks are interoperable with the ACE App.").

5 *See supra* n.1.

the boundary between "enterprise" and "public" phones, workplaces with Deaf employees or patrons.[6]

Sorenson explained that its public phones utilize the ntouch VP1 or VP2. The ntouch VP1 and VP2 do not contain a built-in Internet browser, and Sorenson has no other videophone with a built-in browser.[7] Sorenson's video phones use the ntouch VP1 or VP2 in conjunction with a monitor to create an integrated public videophone. Attached are some photos of various Sorenson public videophone installations.

Sorenson did not include an Internet browser in its videophones for security reasons. Sorenson's ntouch videophones were designed not to have a keyboard or a browser—a purposeful feature that enhances security and makes it more difficult to tamper with the device. Including an Internet browser would have made the videophone more vulnerable to the hundreds of well-publicized browser, operating system, and even processor security bugs from the past two years. Moreover, were Sorenson to replace its videophones with desktops, laptops, or tablets loaded with a soft videophone, that would present its own security vulnerabilities.

As Neustar conceded, implementation of the OAuth protocol would require VRS devices to have a system web browser. Although Sorenson could modify these devices to run a custom-written browser, doing so would be contrary to the security standards outlined in the OAuth protocol, which calls for the use of a system browser. Furthermore, adding a custom browser would give Sorenson access to the user credentials for other providers, which is what OAuth aims to prevent.[8] It would make the devices less secure. Any browser added by Sorenson to its embedded platforms, even if possible, would be a browser using a mix of open source and custom code. Moreover, because there is no keyboard, users would have to log in using a remote control and an on-screen keyboard, making their credentials vulnerable to theft by anyone nearby.

Within the past year Sorenson began upgrading ntouch VP1 videophones to ntouch VP2 videophones and has no plans to replace these with new devices for many years. Sorenson's ntouch devices are its flagship product. Institutions have chosen almost exclusively to use

---

6 Usage of public phones varies by month.

7 A software-based videophone does not itself have a browser. The platform on which it is installed, such as a laptop, tablet, or smartphone, may have its own browser.

8 As Neustar explained in its recent General Notice to iTRS providers,

> Neustar has proposed to the FCC that OAuth 2.0 be the technology solution to this problem. OAuth allows a "relying party" (the default provider of the device) to ask an "Identity provider" (the default provider of the user's TN) to securely authorize the user without divulging to the relying party the credentials of the user. In OAuth terms, the relying party is the "client" and the identity provider is the "authorization server."
>
> We are well aware that providers are not happy with any provider learning who their customers are.

Sorenson's videophones as their public devices precisely because of the innovative design and ease of use for Deaf communication.

Implementing the Neustar proposal using the OAuth standard would also be prohibitively expensive. Sorenson estimates that replacing thousands of ntouch devices with software-based endpoints would cost at least $2 to $3 million (not including the costs of modifying software to permit log in). In many locations, Sorenson's videophones are custom built into phone booth kiosks.[9] Retrofitting these kiosks to use PC or MAC computers may not even be possible, and likely would be less reliable and harder to maintain than today's purpose built VP1 and VP2 devices.

In addition, Neustar admits that if an iTRS provider does not provide public devices, it will be required to create a central OAuth server to authenticate users when invoked by the Neustar OAuth proxy. Even if a provider has software-based endpoints, it will need to create and deploy OAuth servers and retrofit their phones to support the OAuth protocol. Sorenson noted that certain VRS providers have not deployed any public and enterprise phones. Neustar claimed the cost to implement the OAuth proxy will be minimum. But to Sorenson's knowledge, no one has calculated the cost to implement OAuth servers and username/password capability.

Sorenson asked if the volume of calls from public and enterprise videophones is significant enough to justify the implementation costs. Staff explained that although they do not recall the precise percentage of VRS minutes placed on public and enterprise videophones, they believe a significant use case exists that warrants monitoring VRS public phone use for fraud and abuse.

Sorenson volunteered to work with the Bureau to conduct the necessary economic due diligence to ascertain the actual costs that would be incurred by providers to implement the OAuth proposal. Sorenson would be willing to participate in a joint meeting with Neustar and FCC staff to identify and discuss the technical issues and how to determine the actual costs involved to implement the proposed requirement. Additionally, it would be beneficial to find out from consumers how they would weigh the various tradeoffs between ease of public phone use and more secure protection of a customer's telephone number. A PIN will have a particularly strong impact on Deaf users that are older, have cognitive limitations, or who may not be able to afford Internet access in the home but can use public videophones. These disadvantaged users may be harmed by making it more difficult for them to access communications.

User Data Submissions to TRS-URD Database. Sorenson reported on its experiences in submitting data on existing users into the TRS-URD since the system went active on December 29, 2017. Sorenson discovered that for a large number of existing users, it received false rejections, i.e., rejections for consumers who had previously passed in earlier testing and who had no change in data. More than a third of these false rejections were due to the URD, based on

---

[9] Attached to this submission are photographic examples of typical installations of Sorenson's public and enterprise videophones, including installations in phone booth kiosks.

Lexis/Nexis, now rejecting date of birth and/or last four digits of the Social Security Number information that had previously passed, even though such data does not change for a user. The significant number of false rejections has forced more users through the burden of providing additional documentation. We also noted that the version of the Lexis/Nexis service being used by Rolka Loube appears to be slower to update changes in address than the version of Lexis/Nexis that Sorenson has purchased, again leading to false rejections. Sorenson will be pursuing these issues with Rolka Loube.

Sorenson asked if calls by users for which data has been timely entered by February 28, 2018, but for which verification is not fully complete, will be compensable. Staff advised that for existing customers, the rules only require that information be submitted into the URD, not that verification be complete, by February 28. Staff confirmed that so long as information was timely entered, compensation will not be disallowed for consumers still in the manual collection and verification process with Rolka Loube, or on any appeal from Rolka Loube to the DRO.

* * * * *

Please contact the undersigned if you have questions.

Sincerely,

John T. Nakahata
Counsel to Sorenson Communications, LLC

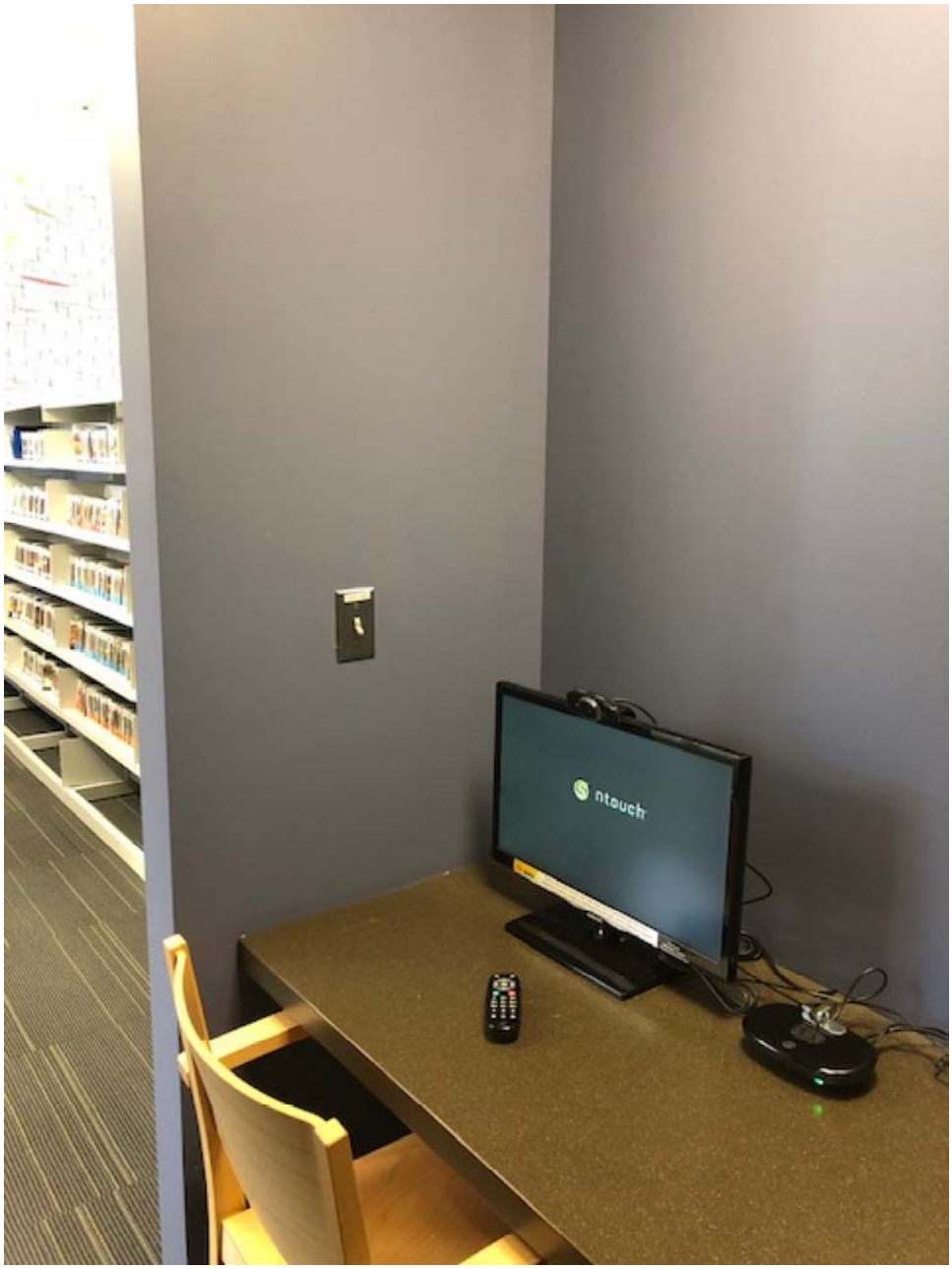
cc: Karen Peltz Strauss
Eliot Greenwald
David Schmidt
Michael Scott

Attachments


SVRS
SVRS
This public videophone booth is available only to individuals who are deaf, hard-of-hearing or speech disabled. Use by other individuals is prohibited by law.
For further information, contact
ntouch
SVRS


Lis
Inform
ns
Inve
ion
Discuss
ence
ellectual
Views
S
Rec
nprove
Inspi
Fun
Advantage
Exchange
unities


SVRS
La cabina de teléfono público se encuentra disponible para personas Sordas, hipoacúsicas o con discapacidades del habla exclusivamente.
ntouch
SVRS


ntouch


SVRS
SVRS
SVRS
GO BISON!
GALLAUDET ATHLETICS
GALLAUDET ATHLETICS
GALLAUDET ATHLETICS